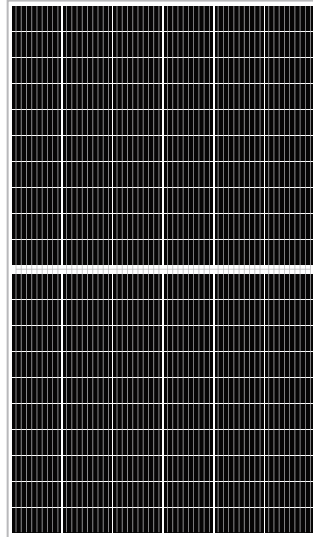
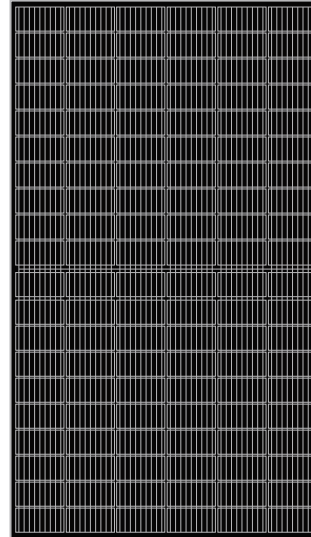


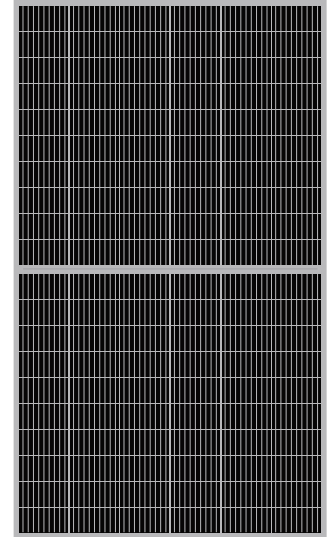
GKA210N120
660W-680W



GKA210N120S
STANDARD



GKA210N120BK
BLACK VERSION



GKA210N120BF
BIFACIAL

KEY FEATURES

M Busbar Solar Cell
M Busbar Solar Cell design improves module efficiency and offers better aesthetic appearance for rooftop installation.

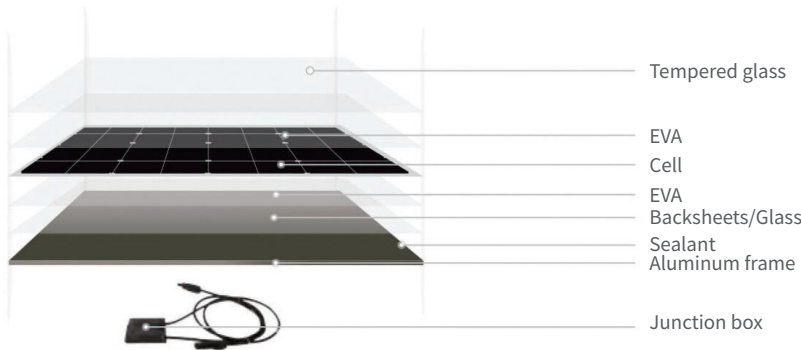
High Efficiency:
Higher module conversion efficiency (up to 24.03%) benefit from N-TOPCon cell technology.

PID Resistance:
Excellent Anti-PID performance guarantee limited power degradation for mass production.

Low-light Performance:
Advanced glass and cell surface textured design ensure excellent performance in low-light environment.

Severe Weather Resilience:
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

DURABILITY AGAINST EXTREME ENVIRONMENTAL CONDITIONS:
High salt mist and ammonia resistance certified.

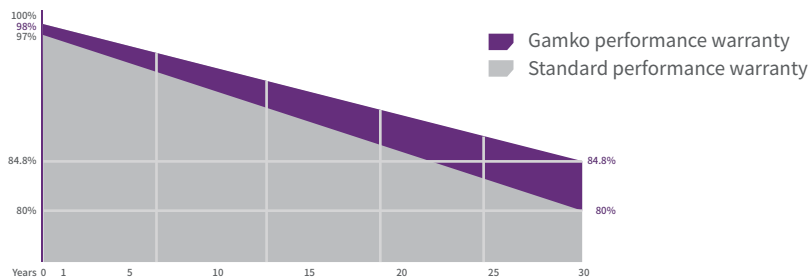


★ GAMKO SOLAR MODULE BOM

- CELLS:** TIER 1 BRANDS SOLAR CELLS
- TEMPERED GLASS:** ULTRA-CLEAR
- EVA:** TRANSPARENCY > 93%
- BACKSHEETS:** REFLECTIVITY > 80%, TPT
- JUNCTION BOX:** IP68 MAX 30A
- SILICON GEL:** UV, AGING-RESISTANT
- FRAME:** ANODIZED ALUMINUM 6005-T5

LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty · 30 Year Linear Power Warranty



★ GAMKO QUALITY CONTROL

- ◆ 2 EL testing avoid cells cracking of each solar module.
- ◆ 2 Power flash testing avoid false welding and insufficient power of each module.
- ◆ Packing tightly with angle protection avoid transportation broken.
- ◆ Gamko official Warranty cover all Gamko solar module 30 years.

GKA210N120
660W-680W



SPECIFICATION

	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(P _{max})	660W	495W	665W	499W	670W	503W	675W	506W	680W	510W
Open Circuit Voltage (V _{oc})	42.95V	40.87V	43.18V	41.12V	43.42V	41.36V	43.64V	41.53V	43.90V	41.77V
Short Circuit Current (I _{sc})	19.36A	15.60A	19.40A	15.63A	19.45A	15.66A	19.49A	15.69A	19.52A	15.72A
Voltage at Maximum Power (V _{mpp})	35.79V	32.91V	35.98V	33.11V	36.18V	33.31V	36.37V	33.44V	36.58V	33.64V
Current at Maximum Power (I _{mp})	18.44A	15.04A	18.48A	15.07A	18.52A	15.10A	18.56A	15.13A	18.59A	15.16A
Module Efficiency STC (%)	23.32%		23.50%		23.67%		23.85%		24.03%	

STC: Irradiance 1000W/m², Cell temperature 25°C, AM1.5; Tolerance of P_{max}: ±3%; Measurement Tolerance: ±3%, P_{max} According Gamko's official testing.
NOCT: Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s; Tolerance of P_{max}: ±3%; Measurement Tolerance: ±3%, P_{max} According Gamko's official testing.

BIFACIAL OUTPUT-REAR SIDE POWER GAIN

5%	Maximum Power(P _{max})	693W	698W	704W	709W	714W
	Module Efficiency STC (%)	24.49%	24.68%	24.85%	25.04%	25.23%
15%	Maximum power (P _{max})	759W	765W	771W	776W	782W
	Module Efficiency STC (%)	26.82%	27.03%	27.22%	27.43%	27.63%
25%	Maximum Power(P _{max})	825W	831W	838W	844W	850W
	Module Efficiency STC (%)	29.15%	29.38%	29.59%	29.81%	30.04%

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline TOPCON 210*105mm
Number of cells	120(6x20)
Module dimensions	2172*1303*30MM
Weight	28kg
Front cover	3.2mm (0.13inches)tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	IP68 rated (3 by pass diodes)
Cable	4mm2(0.006inches2),Portrait: 300mm(11.81inches);
Connector	PV compatible

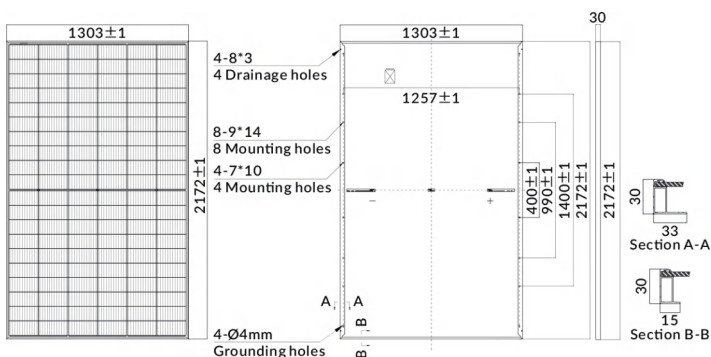
TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	43°C±2°C
Temperature Coefficients of P _{max}	-0.34%/°C
Temperature Coefficients of V _{oc}	-0.25%/°C
Temperature Coefficients of I _{sc}	-0.04%/°C

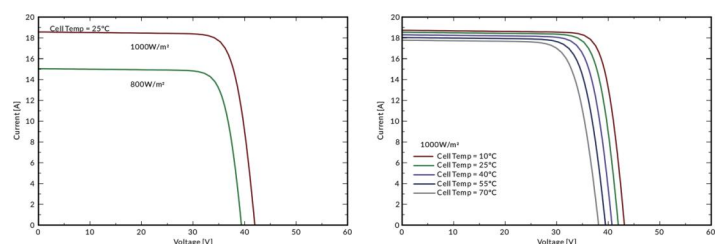
PACKAGING

Standard packaging	36pcs/pallet
Module quantity per 20' container	288pcs(no pallet)
Module quantity per 40' container	648pcs(HQ)

ENGINEERING DRAWINGS



Electrical Performance & Temperature Dependence



Specifications included in this datasheet are subject to change without notice.